

STRANDS

Automation

Thomas Jefferson High School

- I. Measuring
 - 1. Customary System
 - 2. Metric System
 - 3. Using a Ruler
 - 4. Using a Micrometer

- II. Current trends in automation technology
 - 1. New Innovations and Inventions in Automation
 - 2. Current Issues in Automation
 - 3. Safety
 - 4. Careers

- III. CNC Programming
 - 1. What is CNC Programming
 - 2. History of CNC Programming
 - 3. Use in Industry
 - 4. Codes and Programming
 - 5. Application
 - 6. Design and Development

- IV. CAD Software
 - 1. Basic Tools
 - 2. Drawing Set-up
 - 3. Design and Drawing Development
 - 4. Plotting

- V. Computer Aided Manufacturing
 - 1. What is Computer Aided Manufacturing
 - 2. Use in Industry
 - 3. Part Development
 - 4. Application
 - 5. Design and Development

- VI. Robotics Technology
 - 1. What is Robotics Technology
 - 2. Applications of Robotics Today
 - 3. Design Problem
 - 4. Construction of a Robot
 - 5. Testing and Evaluation
 - 6. Presentation